ABSTRACT

The present invention provides a method for driving a piezoelectric ink jet head that surely suppresses the ensuing vibration of the drive section while suppressing the flying speed of the ink droplet from decreasing, by setting the time constant $\tau_{\rm UP}$ of rise of voltage when the drive voltage is applied and/or the time constant $\tau_{\rm DN}$ of fall of voltage when stopping the application of the drive voltage are set in ranges that satisfy the relations of the expressions (i) and (ii):

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$$Ta/(-ln0.01) \le \tau_{UP} \le Ta/(-ln0.25)$$
 (i)

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 $Ta/(-ln0.01) \leq \tau_{DN} \leq Ta/(-ln0.25) \quad (ii)$ with respect to the period Ta of the ensuing vibration of the drive section, or pulse width T_3 of the drive voltage is set at an integral multiple of the period Ta of the ensuing vibration of the drive section.